



SLOVENSKI STANDARD
oSIST prEN 12790-1:2018

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Child care articles - Reclined cradles - Part 1: Reclined cradles for children up to when they try to sit up

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Child care articles - Reclined cradles - Part 1: Reclined cradles for children up to when they try to sit up

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European foreword

This document (prEN 12790-1:2018) has been prepared by Technical Committee CEN/TC 252 “Child care articles”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 12790:2009.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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1 Scope

This document specifies safety requirements and the corresponding test methods for fixed or folding reclined cradles intended for children up to when they start try to sit up.

This document applies also to car seats complying with ECE R44 or ECE R129 that can be used as reclined cradles according to manufacturer's instructions. If usage as reclined cradle is not included in the product information or marketing material, car seats are excluded from the scope of this document.

If a reclined cradle has several functions or can be converted into another function the relevant European standards apply to it.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 71-2:2011+A1:2014, *Safety of toys - Part 2: Flammability*

EN 71-3, *Safety of toys – Part 3: Migration of certain elements*

EN 71-10:2005, *Safety of toys - Part 10: Organic chemical compounds - Sample preparation and extraction*

EN 71-11, *Safety of toys - Part 11: Organic chemical compounds - Methods of analysis*

EN 622-1, *Fibreboards - Specifications - Part 1: General requirements*

EN 717-1, *Wood-based panels - Determination of formaldehyde release - Part 1: Formaldehyde emission by the chamber method*
<https://standards.iteh.ai/catalog/standards/sist/c9d55033-fb93-450f-a8db-6371c818ad32/osist-pren-12790-1-2019>

EN 61558-2-7, *Safety of power transformers, power supplies, reactors and similar products – Part 2-7: Particular requirements and tests for transformers and power supplies for toys (IEC 61558-2-7)*

EN 61558-2-16, *Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V - Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units (IEC 61558-2-16)*

EN 62115:2005, *Electric toys – Safety (IEC 62115:2003 + A1:2004)*

EN ISO 3746:2010, *Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Survey method using an enveloping measurement surface over a reflecting plane (ISO 3746:2010)*

EN ISO 14184-1, *Textiles - Determination of formaldehyde - Part 1: Free and hydrolysed formaldehyde (water extraction method) (ISO 14184-1)*

EN ISO 14362-1, *Textiles - Methods for determination of certain aromatic amines derived from azo colorants - Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres (ISO 14362-1)*

EN ISO 17234-1, *Leather - Chemical tests for the determination of certain azo colorants in dyed leathers - Part 1: Determination of certain aromatic amines derived from azo colorants (ISO 17234-1)*

ISO 7619-1, *Rubber, vulcanized or thermoplastic — Determination of indentation hardness — Part 1: Durometer method (Shore hardness)*

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3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

reclined cradle

article intended to accommodate a child in a reclined position

Note to entry: Reclined cradles may be static, rocking or bouncing and may have an adjustable backrest and/or seat, see A.1.

3.2

seat unit

part of the reclined cradle that support the child, either in the form of a hammock or composed by a seat and a backrest

3.3

restraint system

system to restrain the child within the reclined cradle

3.4

crotch restraint

device designed to pass between the child's legs to prevent the child from sliding forward

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3.5

carrying handle

component to enable the reclined cradle, fully deployed for use, to be carried by hand

3.6

junction line

intersection of the seat and the backrest

3.7

toy bar

any bar or mobile connected to the frame of the product in any location with one or more attachment points typically used to suspend toys over the occupant

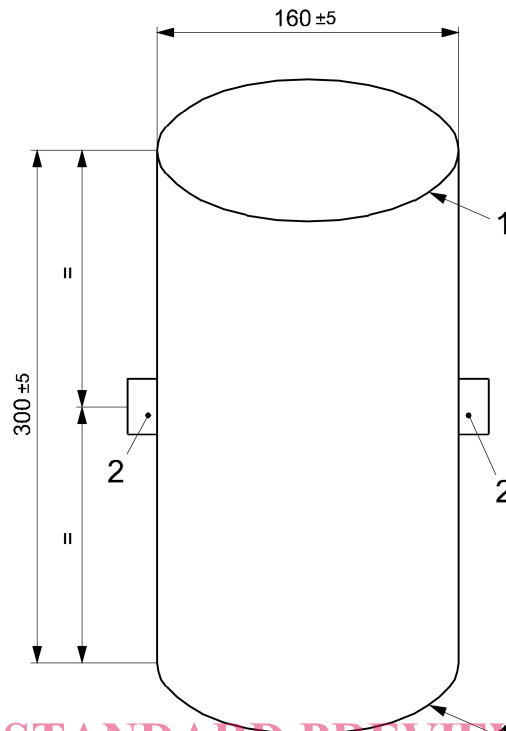
Note to entry: Canopies and carrying handles, fixed and rotating, are not considered a toy bar regardless of whether they allow for the attachment of toys.

4 Test equipment

4.1 Test mass A

Test mass A is a rigid cylinder (160 ± 5) mm in diameter and (300 ± 5) mm in height, having a mass of $9_0^{+0,01}$ kg and with its centre of gravity in the centre of the cylinder. All edges shall have a radius of (5 ± 1) mm. Two anchorage points shall be provided. These shall be positioned ($150 \pm 2,5$) mm from the base and at 180° to each other around the circumference (see Figure 1).

Dimensions in millimetres



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Key

- 1 radius: (5 ± 1) mm
- 2 two anchorage points

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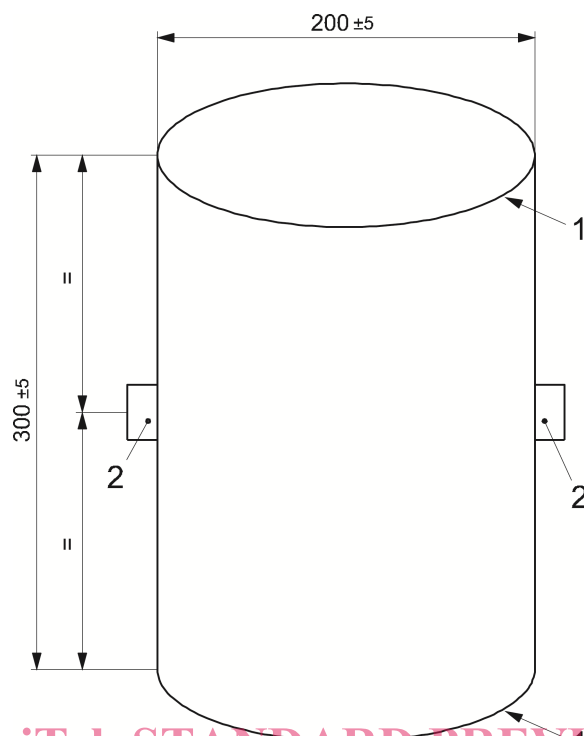
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Figure 1 — Test mass A

4.2 Test mass B

Test mass B is a rigid cylinder (200 ± 5) mm in diameter and (300 ± 5) mm in height, having a mass of $15_0^{+0,01}$ kg and with its centre of gravity in the centre of the cylinder. All edges shall have a radius of (5 ± 1) mm. Two anchorage points shall be provided. These shall be positioned $(150 \pm 2,5)$ mm from the base and at 180° to each other around the circumference (see Figure 2).

Dimensions in millimetres



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Key

- 1 radius: (5 ± 1) mm
- 2 two anchorage points

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Figure 2 — Test mass B**4.3 Small parts cylinder**

Small parts cylinder for the assessment of small components, having dimensions in accordance with Figure 3.

Dimension in millimetres

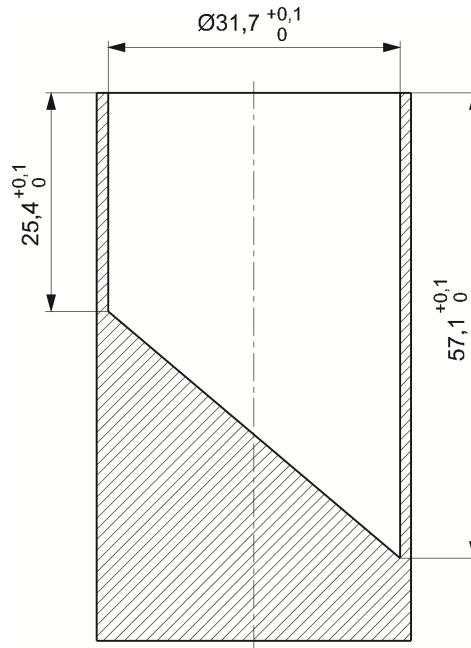


Figure 3 — Small parts cylinder

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4.4 Feeler gauge

Gauge with a thickness of $(0,4 \pm 0,02)$ mm and an insertion edge radius of $(3 \pm 0,5)$ mm (see Figure 4).

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Dimensions in millimetres

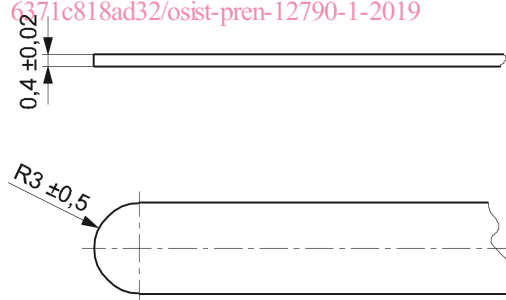


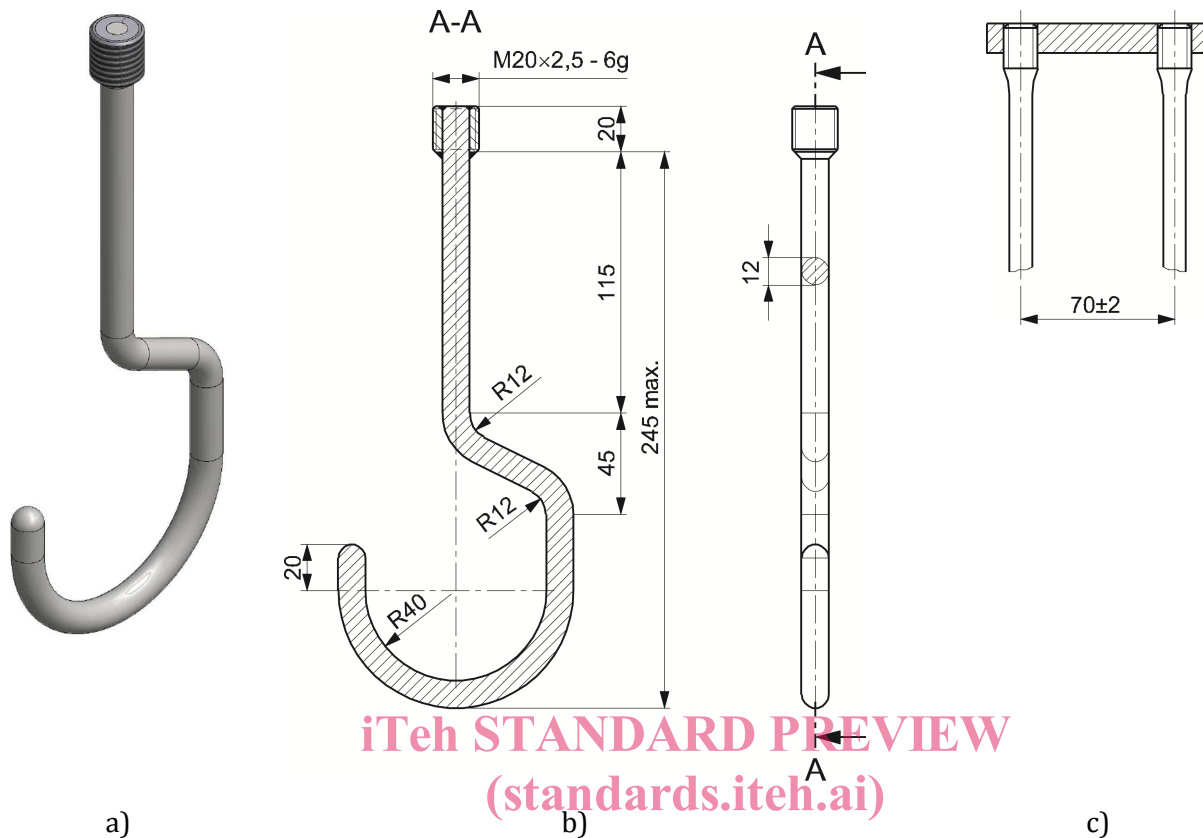
Figure 4 — Feeler gauge

4.5 Test equipment for handle strength test

Hooks rigidly connected to a metal plate (see Figure 5).

The distance between the central axis of two hooks shall be (70 ± 2) mm (see Figure 6).

Dimensions in millimetres



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Key

tolerance of dimension: ± 2 except for the 12 mm diameter.

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Figure 5 — Metal hooks

Rubber adaptor with a Hardness of (70 ± 5) Shore A and a thickness: $10 \text{ mm} \pm 1 \text{ mm}$ as in Figure 6.

Dimensions in millimetres

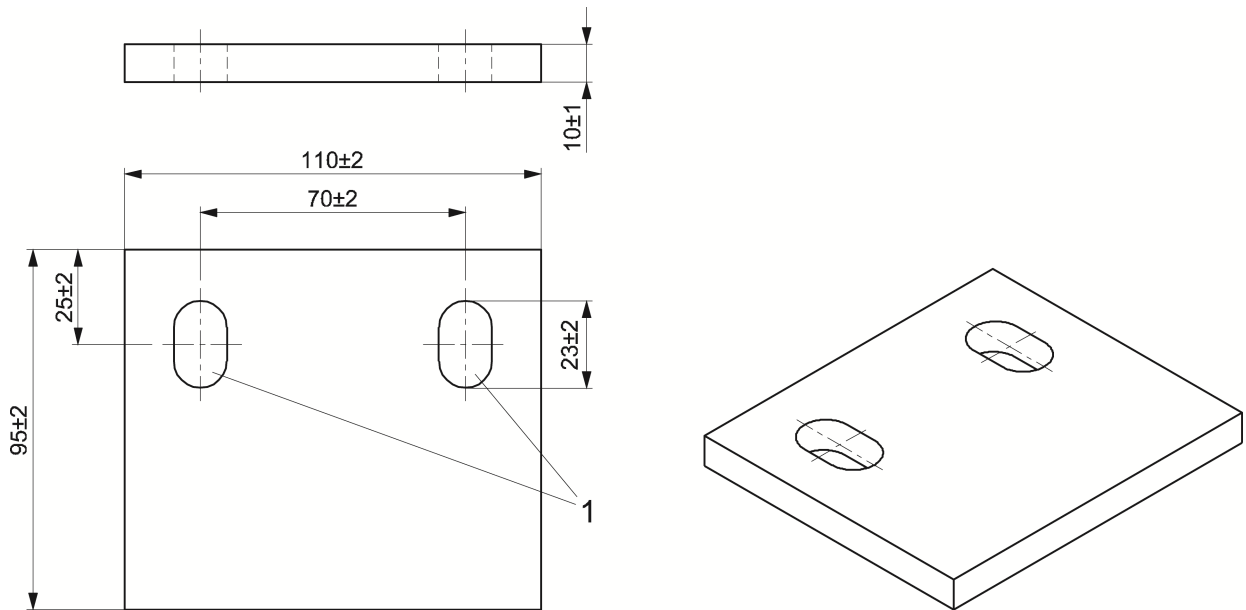
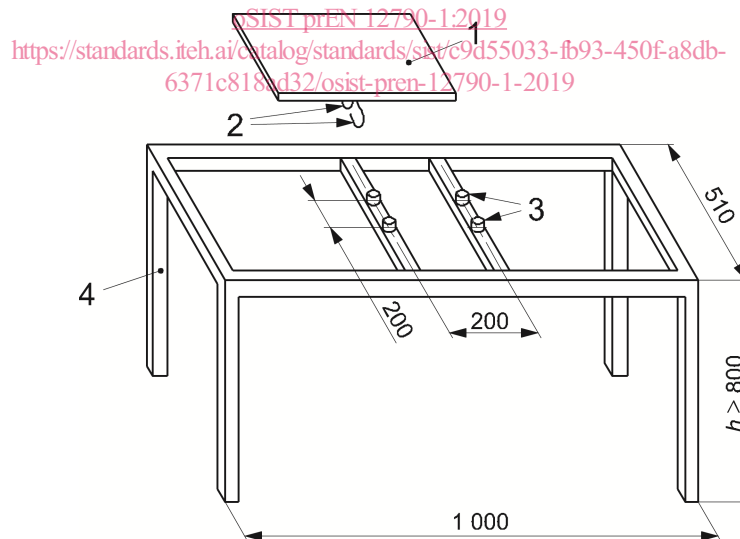


Figure 6 — Rubber adaptor

Four stops of 15 mm high, 30 mm diameter and of hardness (70 ± 5) Shore A according to ISO 7619-1, which are screwed on the rigid frame.

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Dimensions in millimetres

**Key**

- 1 metal plate: $[(300 \pm 5) \times (300 \pm 5)]$ mm and thickness 6 mm
- 2 metal hooks (see Figure 5) rigidly fixed to the metal plate
- 3 stops
- 4 frame made of steel square tube: $[(30 \pm 5) \times (30 \pm 5)]$ mm and thickness 1,5 mm

Figure 7 — Apparatus for dynamic strength test